

EX 6.1 (Torsion balance problem)

1. Since the wire is twisted twice as much, the force would be $\boxed{2 \text{ micro-newtons}}$
2. Turning 25 degrees would cause a force of $\boxed{25 \text{ micro-newtons}}$
3. The tension in the wire should not affect the force, according to Coulomb's earlier publications on the torsion balance.